

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 6, line 10 with the following amended paragraph:

In one implementation, the learning machine classifies a pixel of interest as being located in the first or second region based on the color arrangement exhibited by the pixel of ~~interest~~ interest and its neighboring pixels. Neighboring pixels are those located next to or near the pixel of interest. The learning-machine input set, in this case, is the pixel of ~~interest~~ interest and its neighboring pixels (collectively referred to in this specification as a neighborhood of pixels). A neighborhood of pixels can be, for example, a three-by-three square of pixels, a five-by-five square of pixels, or a seven-by-seven square of pixels. The neighborhood need not necessarily be a square. The pixel of interest is usually, but need not be the center pixel. Alternatively, the neighborhoods of pixels set can include other arrangements of pixels that exhibits a color arrangement that is characteristic of the first or the second region.

Please replace the paragraph beginning on page 16, line 13 with the following amended paragraph:

In implementations where the neural network has four layers and includes gating nodes, such as the implementation shown in FIG. 3, the system can consider both the gating nodes and the hidden nodes to be nodes on layer 2. As discussed above, when there are gating nodes, the neural network includes multiplication nodes, which multiply two ~~inputs—one~~ inputs (one from the corresponding hidden node and one from the corresponding gating node—to node) to produce an output. The neural network can consider the multiplication nodes as nodes on a third layer. The output of the multiplication nodes are feed into the output node, which is on layer 4.

Please replace the paragraph beginning on page 19, line 10 with the following amended paragraph:

A new color $C(F)$ is assigned to the color image at location P (step 670). A value $a \cdot 255$ is assigned to the opacity mask at location P (step 680). a is multiplied by 255 because, in the described implementation, the range of possible values in a mask ranges from 0 to 255. A decontamination process similar to the one described above is described in commonly assigned U.S. Patent Application Ser. No. ~~09/298,872~~ 6,721,446, filed on April 26, 1999 and entitled "Identifying Intrinsic Pixel Colors in a Region of Uncertain Pixels", which is hereby incorporated by reference.